

REMARKS

Claims 1-44 were previously pending. By this Amendment, Applicants are cancelling claims 2-3, 11 and 20-44 and adding new claims 45-47. Applicants are also amending claims 1, 4-7, 9-10 and 12. Claims 1, 4-10, 12-19 and 45-47 are currently pending with claims 1, 12 and 45 being independent claims. No new matter has been added.

I. Rejection Under 35 U.S.C. §112, ¶1

In the office action dated October 9, 2003, the Examiner rejected claims 1 to 19 under 35 U.S.C. 112, second paragraph, on the basis the reference was made to “the swaging formation” in claim 11. The Examiner will note that previous claim 11 has been cancelled and the subject matter of previous claim 11 has been included in amended claim 12. Claim 12 now refers to “two or more swaging formations” and thereafter refers to “each swaging formation”. Accordingly, it is submitted that the objection raised to previous claim 11 under 35 U.S.C. 112, second paragraph, is now moot and withdrawal of the objection is respectfully requested.

II. Rejections Under 35 U.S.C. §§102

The Examiner rejected previous claims 1 and 2 as being anticipated by Schmid (US Patent No 2,767,605). Furthermore, the Examiner rejected previous claims 1 and 11 under 35 U.S.C. 102 (b) as being anticipated by Kennedy (US Patent No 3,164,045).

However, the Examiner indicated that claims 3 to 10 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The Examiner will note that presently amended claim 1 includes the subject matter of previous claims 2 and 3 and that previous claims 2 and 3 have been cancelled. Accordingly, with presently presented dependent claims 4 to 10 being dependent upon allowable claim 1 as amended, it is submitted that presently presented claims 1 and 4 to 10 are allowable.

The Examiner also stated that claims 12 to 19 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims. The Examiner will note that claim 12 currently amended includes all of the features of previous claim 1 and previous claims

11 and 12. Accordingly, it is submitted that currently amended independent claim 12 is allowable. Furthermore, with presently presented claims 13 to 19 being dependent upon allowable claim 12, it is submitted that presently presented claims 13 to 19 are also allowable.

III. Withdrawal of Non-Elected Claims

Claims 20-44 have been cancelled although the Applicants reserve the right to file divisional applications for any or all of the previous claims 20-44 before issuance of the present application.

IV. Remarks on Newly Presented Claims

The Examiner will note that independent claim 45 is newly presented along with dependent claims 46 and 47.

Independent claim 45 includes all of the previous subject matter of previous independent claim 1.

Furthermore, claim 45 further specifies that the apparatus is for swaging an end of an oil and gas metal tubular having a diameter of at least four inches. The basis for this subject matter may be found in the specification as filed, for example on page 1, lines 5-7; page 14, line 5; page 16, line 17; and page 17, line 21.

Furthermore claim 45 includes the feature of a swaging cylinder operable by means of hydraulic fluid pressure to move the swaging head into swaging contact with the end of the tubular. This feature finds basis throughout the specification as filed and in particular on page 9, lines 26 to 27 and page 9, lines 35 to 36, and page 16, lines 34 to 36.

Accordingly, no new subject matter has been added.

Claim 46 includes the same subject matter of previously presented claim 2 and so relates to the two or more swaging formations being provided on an internal bore of the swaging head.

Claim 47 includes the same subject matter as previous claim 11 and so relates to the two or more swaging formations being provided on an external diameter of the swaging head.

Accordingly, newly presented claims 45 to 47 include subject matter which has already been examined.

Newly presented independent claim 45 has been included to specifically claim an oil and gas metal tubular swaging apparatus having the various features set out therein.

It is submitted that newly presented independent claim 45 is novel over the prior art made of record and in particular is novel over the closest prior art, Schmid and Kennedy.

Schmid discloses a hand tool for trueing a pipe end (see title and column 1, line 15). Accordingly, Schmid does not disclose a swaging cylinder operable by means of hydraulic fluid pressure to move the swaging head into swaging contact with the end of the tubular, unlike newly present independent claim 45.

Furthermore, since Schmid discloses a hand tool, it could only be used on relatively malleable metals such as copper, brass, or aluminium or alloys thereof (see column 1, line 44). Clearly, Schmid would be entirely unsuitable for use with oil and gas metal tubulars (commonly known in the oil and gas industry as "OCTG" products), which by their very nature must be relatively non-malleable.

Accordingly, claim 45 is novel over Schmid.

Furthermore, Kennedy does not disclose an oil and gas metal tubular swaging apparatus for swaging such tubulars of at least four inches in diameter. Specifically, Kennedy again discloses a tool for use with malleable material such as copper pipe (see column 2, line 38) such as plumbers copper tubing. Furthermore, the maximum diameter that the Kennedy tube swaging tool can be used with is three inches (see column 2, line 29). Also, Kennedy is a hand held swaging tool, has a head 18 which is struck by a hammer (see column 3, line 1) and thus the Kennedy tool is significantly different from the invention defined in independent claim 45 since there is no disclosure in Kennedy of a swaging cylinder operable by means of hydraulic fluid pressure to move the swaging head into swaging contact with the end of the tubular.

Furthermore, it is submitted that the differences between the subject matter of newly presented independent claim 45 and the prior art would not have been obvious to a person having ordinary skill in the art in the oil and gas tubular industry (and in particular to OCTG products). Indeed, it is submitted that there would be no expectation of success if the skilled person were to use the hand operated tools disclosed in either Schmid or Kennedy on the end of an oil and gas metal tubular of at least four inches in diameter since a person of ordinary skill in the art would automatically realise they could not provide enough force to effect the swage.

Furthermore, it should be noted that the term “swage” within the present set of claims is not used to refer to the process of initially manufacturing such a metal tube using hot rolling which some of the prior references do relate to. Instead, the term “swage” used in the present application refers to swaging inwardly or outwardly the outer diameter of the ends of a pipe by a suitable amount so that a thread can be formed thereon, but it is important that there are no thick or thin sections of wall thickness on the pipe end since otherwise the strength of the pipe connection provided will be compromised.

Accordingly, it is submitted that independent claim 45 and dependent claims 46 and 47 are allowable.

V. Prior Art Cited By The Examiner

The prior art cited by the Examiner and made of record but not relied upon has been considered by the Applicants but is not considered to prejudice the patentability of the presently filed claims.

VI. Response By Applicants

The Applicants submit they have responded fully to the objections raised by the Examiner and have specifically pointed out how the language of the claims patentably distinguishes them from the references, in particular to claims 45 to 47.

VII. Conclusion

Accordingly, it is respectfully submitted that all rejections or objections have been appropriately addressed and that all rejections or objections are rendered moot. Applicants respectfully request that a timely notice of Allowance be issued in this case.

Should the Examiner believe that anything further is desirable to place the application in better condition for allowance, the Examiner is invited to contact the Applicants’ representative at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee

occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,


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